# MONTGOMERY COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION DIVISION OF TRAFFIC AND PARKING SERVICES

#### March 2000

# STREETLIGHT INSTALLATION GUIDELINES UNDERGROUND DISTRIBUTION

# Policy LTG-2

- I) Residential Areas
- A) Single Family Land Use roadways 36' or less.
  - 1) Luminaires (each equipped with a photocell)
    - a) Colonial post top (Type III distribution) energized by utility company.
    - b) Contemporary post top (Type III distribution) -energized by utility company.
    - c) Decorative "Washington Globe" post top (Type III distribution) furnished and installed by others -energized by utility company (specifications separately approved by DPWT in advance)
  - 2) Posts

For luminaire a) or b): 12' to 16' above ground, direct burial, black or grey

fiberglass.

For luminaire c) 12' cast iron or cast aluminum with 17" pedestal

(footings are required for this style post).

3) Lamps

For luminaire a), b) or c):

PEPCO area - 70 watt HPSV (mid-block) and 100 watt HPSV at intersections and specially designated areas as approved by DTPS.

BG&E and Allegheny Power areas - 100 watt HPSV as approved by DTPS (minimum

wattage provided by these areas).

# 4) <u>Lateral Placement</u>

For luminaire a), b) or c):

Streetlights at intersections shall be placed two feet (2') from the back of the curb or a minimum of six feet (6') from the edge of pavement in open section roadways.

Streetlights throughout a subdivision shall be placed one foot (1') in front (street side) of the sidewalk on open section tertiary, secondary, or primary residential roadways.

# 5) Longitudinal Spacing

For luminaire a), b) or c):

High density (19,999 Sq. Ft. or less lots) -- 175' maximum alternate arrangement desirable, using property lines whenever possible, and using opposite arrangement for divided roadways.

Low density (20,000 Sq. Ft. or greater lots) -- 300' maximum alternate arrangement using property line where possible and using opposite arrangement for divided roadways.

#### 6) General Installation Guidelines

- a) Provide appropriate streetlight at intersection with an existing roadway. Use existing utility poles if available.
- b) Install the first streetlight a maximum of one half of the specified longitudinal spacing from intersection.
- c) Streetlights should be oriented towards the major road at T-type intersections and at four-way stop intersections.
- d) Maintain the following minimum clearance distances;

Five feet (5') from driveways, inlets, storm drains, and fire hydrants;

Ten feet (10') from water, gas, electric and sewer lines;

#### Fifteen feet (15') from trees.

- B. <u>Multi-Family Land Use</u> roadways 36' wide or less (NOTE: for multi-family land use roadways wider than 36', see Part II, Commercial/Industrial Areas).
  - 1. Luminaire (each equipped with a photocell)
    - a) Colonial post top (Type III distribution) energized by utility company.
    - b) Cobra (Type III distribution), cut-off [flat glass] energized by utility company.
    - Rectilinear (Type III distribution), decorative bronze furnished and installed by others - energized by utility company (specifications approved by DPWT).
       PEPCO region only.
    - d) Residential decorative (Washington Globe) (Type III distribution), decorative green furnished and installed by others energized by utility company (specifications approved by DPWT).

# 2. Post

For luminaire a): 12' to 16' above ground, black or grey fiberglass, direct

burial.

For luminaire b): 26' pendant aluminum post, concrete footing or screw

base required.

For luminaire c): 25' round, galvanized steel or aluminum, bronze coated

pole (specifications shall be approved by DPWT),

concrete footing or screw base required.

For luminaire d): 12' cast iron or cast aluminum with 17" pedestal

(concrete footings are required for this style post).

# 3. Lamp

For luminaire a) or d):

100 to 150 watt, HPSV.

For luminaire b):

100 to 250 watt, HPSV.

For luminaire c): 150 to 250 watt, HPSV.

#### 4. Lateral Placement

For luminaire a), b), c) or d):

Streetlights at intersections shall be placed two feet (2') from the back of the curb or a minimum of six feet (6') from the edge of pavement in open section roadways.

Streetlights throughout a subdivision shall be placed one foot (1') in front of the sidewalk on open section tertiary, secondary, or primary residential roadways.

Streetlights shall be placed one foot (1') behind the sidewalk and/or one foot (1') in front of the property line on open section master plan arterial, or higher roadways.

# 5. Longitudinal Spacing

150' maximum alternate arrangement desirable.

#### 6. General Installation Guidelines

- a) Provide appropriate streetlight at intersection with an existing roadway. Use existing utility poles if available.
- b) Install the first streetlight a maximum of one half the specified longitudinal spacing from intersection.
- c) Streetlights should be oriented towards the major road at T-type intersections and at four-way stop intersections.
- d) Maintain the following clearance minimum distances:

Five foot (5') from driveways, inlets, strom drains, and fire hydrants:

Ten foot (10') from water, gas, electric and sewer lines:

Fifteen foot (15') from trees.

# II. Commercial and Industrial Areas

(NOTE: This includes multi-family land use on roadways wider than 36').

- 1. Luminaires (each equipped with a photocell)
  - a) Cobra (Type III distribution), cut-off [flat glass] energized by utility company.
  - b) Rectilinear (Type III distribution), decorative bronze furnished and installed by others energized by PEPCO (specifications separately approved by DTPS are available upon request). PEPCO region only.
  - Rectilinear (rectangular) (Type III distribution), decorative bronze furnished, installed and energized by utility company. ALLEGHENY POWER AND BALTIMORE GAS & ELECTRIC regions.

#### 2. Posts

For luminaire a): 26' spun aluminum pendant style, concrete footing or screw

base preferred (direct burial may be allowed in special

circumstances.)

For luminaire b): 25' to 40' galvanized steel or aluminum, bronze coated pole

(specifications shall be approved by DTPS.)

For luminaire c): 25' or 30', square steel pole, bronze colored pole, screw base

mounted.

3. Lamps

For luminaire a): 100-250 watt HPSV with photoelectric control on each pole.

For luminaire b): 100-250 watt HPSV HPSV with photoelectric control on each

pole. (Specification as separately approved by DTPS upon

request).

For luminaire c): 100 - 200 watt HPSV HPSV with photoelectric control on

each pole.

# 4. Lateral Placement

For luminaire a), b)or c): one foot (1') behind the back of the sidewalk or one

foot in front of the County right-of-way line.

# 5. <u>Longitudinal Spacing</u>

For luminaire a), b) or c): 125' to 150' opposite arrangement desirable.

#### 6. General Installation Guidelines

- a) Provide appropriate streetlight at intersection with an existing roadway. Use existing utility poles if available.
- b) Install the first streetlight a maximum of one half of the specified longitudinal spacing.
- c) Streetlight should be oriented towards the major road at T-type intersections and at four-way stop intersections.
- d) Maintain the following clearance distances:

Five foot (5') from driveways, inlets, storm drains, and fire hydrants:

Ten foot (10') from water, gas, electric and sewer lines:

Fifteen foot (15') from trees.

# III) Arterial and Major Roadways (CIP Projects)

- 1) Luminaires (each equipped with a photocell)
  - a) Cobra (Type III distribution) cut-off furnished, installed and energized by utility company.
  - b) Rectilinear (Type III distribution) decorative bronze --furnished by others and

installed by either utility company or others - energized by utility company. (Specifications as separately approved by DTPS)

 Rectilinear (rectangular), (Type III distribution) decorative bronze -- furnished, installed and energized by utility company. ALLEGHENY POWER OR BALTIMORE GAS & ELECTRIC regions.

#### 2. Posts

For luminaire a): 26' pendant style, concrete footing or screw base mounted

preferred.

For luminaire b): 25' to 40' galvanized steel or aluminum, bronze coated poles,

concrete footing required (specifications shall be approved by

DTPS.)

For luminaire c): 25 or 30', square pole, concrete footing or screw base

mounted.

# 3. Lamps

For luminaire a): 100 - 250 watt, HPSV HPSV with photoelectric control on

each pole.

For luminaire b): 100 - 250 watt HPSV HPSV with photoelectric control on

each pole. (Specification as approved by DTPS.)

For luminaire c): 100 or 200 watt HPSV HPSV with photoelectric control on

each pole.

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# 4. Lateral Placement

For luminaire a), b) or c): one foot (1') behind the back of the sidewalk or one

foot in front of the County right-of-way line.

# 5. <u>Longitudinal Spacing</u>

For luminaire a), b), or c):

- a) 125' to 150' desirable.
- b) alternate spacing for roadways up to 36' wide.
- c) opposite arrangement for roadways over 36' wide and for divided roadways.

# 6. General Installation Guidelines

- a). Provide appropriate streetlight at intersection with an existing roadway, Use existing utility poles if available.
- b) Install the first streetlight a maximum of one half of the specified longitudinal spacing from the intersection.
- c) Streetlight should be oriented towards the major road at T-type intersections and at four-way stop intersections.
- d) Maintain the following minimum clearance distances:

Five foot (5') from driveways, inlets, storm drains, and fire hydrants:

Ten foot (10') from water, gas, electric and sewer lines:

Fifteen foot (15') from trees.

#### IV. Metro-Impact Areas/Urban Revitalization Districts

#### 1. Lateral Placement

Shall be installed as specified in the master plan and/or sector plan, most recent publication, as approved by M-NCPPC/DPWT.

# 2. Longitudinal Placement

Shall be as specified in the master plan and/or sector plan, most recent publication, as approved by M-NCPPC/DPWT.

The following architecturally designed streetlight fixtures (luminaires and posts) have been

# approved for use:

# Vehicular Streetlights

Bethesda Lantern
Damascus Highlight
Rectilinear, Decorative Bronze
Silver Spring Highlight
Wheaton Highlight
Avenel Decorative Lights

# Pedestrian Lights

Damascus Light Silver Spring Washington Globe Silver Spring Cluster Washington Globe Wheaton Light

All the above fixtures are furnished, installed by others - energized by the utility company. Specifications as separately approved by DTPS are available on requests.

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